```
=> s l1 full
FULL SEARCH INITIATED 15:32:01 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 125668 TO ITERATE

100.0% PROCESSED  125668 ITERATIONS                          936 ANSWERS
SEARCH TIME: 00.00.01

L3          936 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                             170.00     170.21

FILE 'CAPLUS' ENTERED AT 15:32:15 ON 30 JUL 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 30 Jul 2004  VOL 141 ISS 6
FILE LAST UPDATED: 29 Jul 2004  (20040729/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

=> d l3
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y
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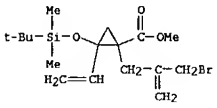
L3 ANSWER 1 OF 936 REGISTRY COPYRIGHT 2004 ACS on STN
RN 717127-28-1 REGISTRY
CN Cyclopropanecarboxylic acid, 1-[2-(bromomethyl)-2-propenyl]-2-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-ethenyl-, methyl ester (9CI) (CA INDEX NAME)
MF C17 H29 Br O3 Si
SR CA



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=> s l3
L4          260 L3

=> s l4 and pyrrol?
         128218 PYRROL?
L5           13 L4 AND PYRROL?

=> d l5 ibib abs hitstr 1-13
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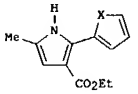
L5 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:141810 CAPLUS
DOCUMENT NUMBER: 140:339152
TITLE: Synthesis of 2,2'-bipyrroles and 2,2'-thienylpyrroles from donor-acceptor cyclopropanes and 2-cyanoheteroles
AUTHOR(S): Yu, Ming; Pantos, G. Dan; Sessler, Jonathan L.; Pagenkopf, Brian L.
CORPORATE SOURCE: Department of Chemistry and Biochemistry, University of Texas at Austin, Austin, TX, 78712, USA
SOURCE: Organic Letters (2004), 6(6), 1057-1059
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



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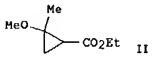
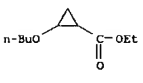


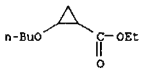
II

AB Two series of 2,2'-bipyrroles, e.g., I (X = NH), and 2,2'-thienylpyrroles, e.g., I (X = S), have been prepd. by trimethylsilyl trifluoromethanesulfonate-mediated reaction of donor-acceptor cyclopropanes, e.g., II, with 2-cyanopyrroles and 2-cyanothiophene, resp. This method opened the door for synthesis of a wide variety of unsym. bipyrroles and thienylpyrroles.
IT **78932-45-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of bipyrrolecarboxylates and thienylpyrrolecarboxylates via heterocyclization of alkoxycyclopropanecarboxylates with cyanopyrroles or cyanothiophene)
RN 78932-45-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2-butoxy-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:960478 CAPLUS
DOCUMENT NUMBER: 140:111237
TITLE: A Powerful New Strategy for Diversity-Oriented Synthesis of **Pyrroles** from Donor-Acceptor Cyclopropanes and Nitriles
AUTHOR(S): Yu, Ming; Pagenkopf, Brian L.
CORPORATE SOURCE: Department of Chemistry and Biochemistry, The University of Texas at Austin, Austin, TX, 78712, USA
SOURCE: Organic Letters (2003), 5(26), 5099-5101
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Lewis acid-activated donor-acceptor cyclopropanes react with aliph., arom., and .alpha.,.beta.-unsatd. nitriles in a novel cascade [3 + 2] dipolar cycloaddn., dehydration, and tautomerization sequence to afford **pyrroles** in moderate to excellent overall yield. This cost-effective and regiospecific method is ideally suited for the prepn. of combinatorial libraries.
IT **78932-45-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(diversity-oriented synthesis of **pyrroles** via Lewis acid-activated cycloaddn./dehydration/tautomerization reactions of various donor-acceptor cyclopropanes and nitriles)
RN 78932-45-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2-butoxy-, ethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:875173 CAPLUS
DOCUMENT NUMBER: 139:381511
TITLE: **Pyrrolotriazine** aniline compounds useful as kinase inhibitors, particularly p38 kinases, and their preparation, pharmaceutical compositions, and use as antiinflammatory agents
INVENTOR(S): Dyckman, Alaric; Hynes, John; Leftheris, Katherina; Liu, Chunjian; Wrobleski, Stephen T.
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 158 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

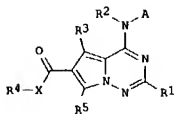
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003090912	A1	20031106	WO 2003-US12426	20030415
WO 2003090912	C2	20040108		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004082582	A1	20040429	US 2003-420399	20030422

PRIORITY APPLN. INFO.: US 2002-374938P P 20020423
OTHER SOURCE(S): MARPAT 139:381511
GI

L5 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



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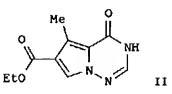

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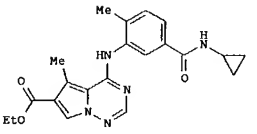


III

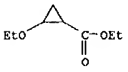
AB Title compds. I and their enantiomers, diastereomers, pharmaceutically
acceptable salts, prodrugs, and solvates are useful as p38 kinase inhibitors [wherein: A = certain substituted Ph rings, particularly bearing various carboxamide and sulfonamide substituents; X = O, OCO, S,
S(O), SO2, CO, CO2, (un)substituted NH, NHCO, NHCONH, NHCO2, NHSO2, NHSO2NH, SO2NH, or CONH, halo, NO2, cyano, or bond; R1, R5 = H, (un)substituted alkyl, OH or derivs., SH or derivs, CO2H or derivs., NH2
or derivs., halo, NO2, cyano; R2 = H, alkyl; R3 = H, Me, CF3, MeO, halo,
cyano, NH2, or NHMe; R4 = H (with provisos), (un)substituted alk(en/yn)yl,
(hetero)aryl, (hetero)cycloalkyl, or absent]. Over 300 specific compds. I
and various intermediates were prepd. Compds. I selectively inhibited
human p38.alpha./.beta. isoenzymes and TNF-.alpha. in vitro (no data).
For instance, 3-amino-4-methylbenzoic acid was amidated quant. with cyclopropylamine using EDC and DMAP in DMF. The **pyrrolotriazinone** ester II was then chlorinated at the ring oxo group with POCl3 (100%).
Aminolysis of the resulting chloride with the benzamide product from the
first step gave 80% invention compd. III.

IT **5604-58-0P**

L5 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(intermediate; prepn. of **pyrrolotriazine** aniline compds. as p38 kinase inhibitors)

RN 5604-58-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-ethoxy-, ethyl ester (6CI, 9CI) (CA INDEX
NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:828731 CAPLUS
DOCUMENT NUMBER: 140:27547
TITLE: Electronically tuned chiral ruthenium porphyrins: Extremely stable and selective catalysts for asymmetric epoxidation and cyclopropanation
AUTHOR(S): Berkessel, Albrecht; Kaiser, Patrick; Lex, Johann
CORPORATE SOURCE: Institut fuer Organische Chemie der Universitaet zu
Koeln, Cologne, 50939, Germany
SOURCE: Chemistry--A European Journal (2003), 9(19), 4746-4756
CODEN: CEUJED; ISSN: 0947-6539
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:27547

AB We report the use of three enantiomerically pure and electronically tuned
ruthenium carbonyl porphyrin catalysts for the asym. cyclopropanation and
epoxidn. of a variety of olefinic substrates. The D4-sym. ligands carry a
methoxy, a Me or a trifluoromethyl group at the 10-position of each of the
9-[anti-(1,2,3,4,5,6,7,8-octahydro-1,4:5,8-dimethanoanthracene)]-substituents at the meso-positions of the porphyrin. Introduction of a
CF3-substituent in this remote position resulted in greatly improved catalyst stability, and turnover nos. of up to 7500 were achieved for cyclopropanation, and up to 14200 for epoxidn., with ee values typically
>90% and .apprxeq.80%, resp. In one example, the axial CO ligand at the
ruthenium was exchanged for PF3, resulting in the first chiral ruthenium
porphyrin with a PF3 ligand reported to date. In cyclopropanations with
Et diazoacetate, the latter catalyst performed exceedingly well, and gave
a 95% ee in the case of 1,1-diphenylethylene as substrate.

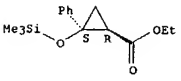
IT **213823-98-4P**
RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of electronically tuned chiral ruthenium porphyrins as extremely stable and selective catalysts for asym. epoxidn. and cyclopropanation of alkenes)

RN 213823-98-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-phenyl-2-[(trimethylsilyl)oxy]-, ethyl ester, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L5 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

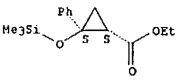


IT **213618-93-0P**
RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(up to 83% ee; prepn. of electronically tuned chiral ruthenium porphyrins as extremely stable and selective catalysts for asym. epoxidn. and cyclopropanation of alkenes)

RN 213618-93-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-phenyl-2-[(trimethylsilyl)oxy]-, ethyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:669412 CAPLUS
DOCUMENT NUMBER: 136:6308
TITLE: Siloxycyclopropanes in Ugi four-component reaction: a new method for the synthesis of highly substituted **pyrrolidinone** derivatives
AUTHOR(S): Zimmer, Reinhold; Ziemer, Antje; Gruner, Margit; Brudgam, Irene; Hartl, Hans; Reissig, Hans-Ulrich
CORPORATE SOURCE: Institut fur Chemie - Organische Chemie, Freie Universitat Berlin, Berlin, 14195, Germany
SOURCE: Synthesis (2001), (11), 1649-1658
CODEN: SYNTBF; ISSN: 0039-7881
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 136:6308
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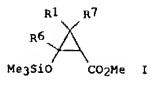
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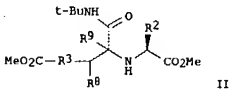
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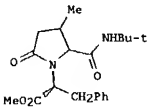
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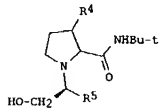
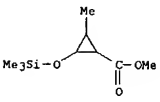
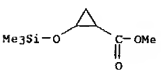

IV

AB Reaction of Me trimethylsiloxycyclopropanecarboxylates I (R1 = H, Me; R6 = H, Me; R7 = H, Me) with amino acids, tert-butylisonitrile and methanol furnished amino diacid derivs. II (R2 = Bn, CH2indolyl, Me, CHMeEt; R3 = CH2, (CH2)2; R8 = H, Me; R9 = H, Me] as the result of an Ugi 5-center 4-component reaction. This one-pot reaction involves .beta.-formyl esters such as MeOCOCH2CH(Me)COH as intermediate, which are liberated in situ. Adducts II could be thermally cyclized to provide .gamma.-lactams in good

L5 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 90288-79-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2-[(trimethylsilyl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



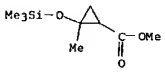
REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

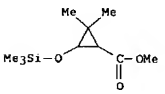
yields. The multi component reaction was combined with this cyclization process to a fairly efficient one-pot procedure. Thus, cyclopropane deriv. I (R1 = H) was converted into .gamma.-lactam III in good yield. Two of the .gamma.-lactams were reduced with lithium aluminum hydride to give **pyrrolidine** derivs. IV (R4 = R5 = Me; R4 = H, R5 = Bn). Based on an X-ray anal. of the major diastereomer of compd. IV (R4 = H, R5 = Bn), the diastereoselectivity of the 4-component reaction is discussed.

IT **77903-43-6 77903-45-8 82884-40-0 90288-79-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(one-pot synthesis of **pyrrolidinone** derivs. by Ugi reaction and cyclization from siloxycyclopropanes, amino acids, tert-butylisonitrile and methanol)

RN 77903-43-6 CAPLUS
CN Cyclopropanecarboxylic acid, 2-methyl-2-[(trimethylsilyl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 77903-45-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-[(trimethylsilyl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 82884-40-0 CAPLUS
CN Cyclopropanecarboxylic acid, 2-methyl-3-[(trimethylsilyl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

L5 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:609622 CAPLUS
DOCUMENT NUMBER: 133:309693
TITLE: A new strategy for the stereoselective synthesis of 1,2,3-trisubstituted cyclopropanes
AUTHOR(S): Bohm, Claudius; Schinnerl, Marina; Bubert, Christian; Zabel, Manfred; Labahn, Thomas; Parisini, Emilio; Reiser, Oliver
CORPORATE SOURCE: Institut fur Organische Chemie Universitat Regensburg, Regensburg, 93053, Germany
SOURCE: European Journal of Organic Chemistry (2000), (16), 2955-2965
CODEN: EJOCFK; ISSN: 1434-193X
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 133:309693
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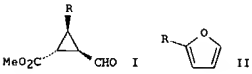

I II

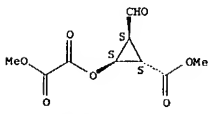
AB The stereoselective synthesis of highly functionalized 1,2,3-trisubstituted cyclopropanes I (R = OCHO, OCOCO2Me), starting from readily available furans II (R = H, CO2Me) or N-Boc protected **pyrrole**, is described. Furthermore, exceptionally high diastereocontrol in agreement with the Felkin-Anh model was obsd. for the addn. of nucleophiles to the title compds.

IT **302349-67-3P**
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(stereoselective prepn. and crystal structure of trisubstituted cyclopropanes via copper catalyzed cyclopropanation of furans or N-protected **pyrroles** with elaboration of formyl substituent via nucleophilic addn. reactions)

RN 302349-67-3 CAPLUS
CN Ethanedioic acid, (1R,2R,3R)-2-formyl-3-(methoxycarbonyl)cyclopropyl methyl ester, rel- (9CI) (CA INDEX NAME)

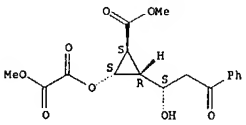
Relative stereochemistry.

L5 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



IT **302349-68-4P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(stereoselective prepn. and crystal structure of trisubstituted cyclopropanes via copper catalyzed cyclopropanation of furans or N-protected **pyrroles** with elaboration of formyl substituent via nucleophilic addn. reactions)
RN 302349-68-4 CAPLUS
CN Ethanedioic acid, (1R,2R,3S)-2-(methoxycarbonyl)-3-[(1R)-1-hydroxy-3-oxo-3-phenylpropyl]cyclopropyl methyl ester, rel- (9CI) (CA INDEX NAME)

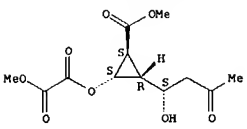
Relative stereochemistry.



IT **302349-69-5P 302349-70-8P 302349-71-9P**
302349-72-0P 302349-73-1P 302349-81-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(stereoselective prepn. and crystal structure of trisubstituted cyclopropanes via copper catalyzed cyclopropanation of furans or N-protected **pyrroles** with elaboration of formyl substituent via nucleophilic addn. reactions)
RN 302349-69-5 CAPLUS
CN Ethanedioic acid, (1R,2S,3R)-2-[(1R)-1-hydroxy-3-oxobutyl]-3-(methoxycarbonyl)cyclopropyl methyl ester, rel- (9CI) (CA INDEX NAME)

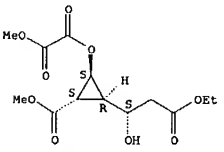
Relative stereochemistry.

L5 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



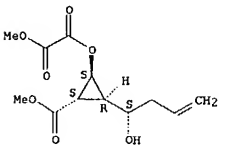
RN 302349-70-8 CAPLUS
CN Ethanedioic acid, (1R,2S,3R)-2-[(1R)-3-ethoxy-1-hydroxy-3-oxopropyl]-3-(methoxycarbonyl)cyclopropyl methyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 302349-71-9 CAPLUS
CN Ethanedioic acid, (1R,2S,3R)-2-[(1R)-1-hydroxy-3-butenyl]-3-(methoxycarbonyl)cyclopropyl methyl ester, rel- (9CI) (CA INDEX NAME)

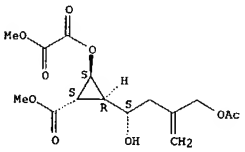
Relative stereochemistry.



RN 302349-72-0 CAPLUS
CN Ethanedioic acid, (1R,2S,3R)-2-[(1R)-3-[(acetyloxy)methyl]-1-hydroxy-3-butenyl]-3-(methoxycarbonyl)cyclopropyl methyl ester, rel- (9CI) (CA

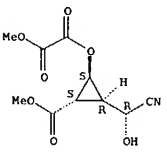
L5 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
INDEX NAME)

Relative stereochemistry.



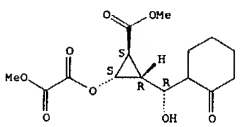
RN 302349-73-1 CAPLUS
CN Ethanedioic acid, (1R,2S,3R)-2-[(S)-cyanohydroxymethyl]-3-(methoxycarbonyl)cyclopropyl methyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 302349-81-1 CAPLUS
CN Ethanedioic acid, (1R,2S,3R)-2-[(S)-hydroxy(2-oxocyclohexyl)methyl]-3-(methoxycarbonyl)cyclopropyl methyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



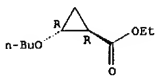
REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS

L5 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L5 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:97387 CAPLUS
DOCUMENT NUMBER: 132:278929
TITLE: Cyclopropanation of alkenes, N-H and S-H insertion of ethyl diazoacetate catalyzed by ruthenium porphyrin complexes
AUTHOR(S): Galardon, Erwan; Le Maux, Paul; Simonneaux, Gerard
CORPORATE SOURCE: Laboratoire de Chimie Organometallique et Biologique, UMR 6509, Universite de Rennes 1, Rennes, 35042, Fr.
SOURCE: Tetrahedron (2000), 56(4), 615-621
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 132:278929
AB Product yields, stereoselectivities and regioselectivities for cyclopropanation reactions of Et diazoacetate with styrene derivs. and .alpha.-heteroatom alkenes, catalyzed by ruthenium porphyrins, are reported and compared with obsd. stereoselectivities for cyclopropanation reactions catalyzed with other metalloporphyrin catalysts. Linear correlations are obsd. when the rates for competitive cyclopropanation or product stereoisomer ratio are plotted against Hammett consts. of various ring-substituted groups on styrenes. Isomeric distribution for the cyclopropanation of isoprene and 1,3-pentadiene with Et diazoacetate and competition studies of the cyclopropanation and diazo insertion into heteroatom-hydrogen bonds are also reported. All these results agree with a major electronic and steric influence on both the regiochem. and stereochem. control in the catalytic cyclopropanation and diazo insertion reactions.
IT **109491-16-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 109491-16-9 CAPLUS
CN Cyclopropanecarboxylic acid, 2-butoxy-, ethyl ester, (1R,2R)-rel- (9CI)
(CA INDEX NAME)

Relative stereochemistry.

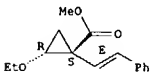
L5 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:26987 CAPLUS
DOCUMENT NUMBER: 124:231554
TITLE: Asymmetric reactions catalyzed by chiral metal complexes LXX. Steric and electronic effects of substrates and rhodium chiral catalysts in asymmetric cyclopropanation
AUTHOR(S): Yoshikawa, Kiyoshi; Achiwa, Kazuo
CORPORATE SOURCE: School Pharmaceutical Sciences, Univ. Shizuoka, Shizuoka, 422, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1995), 43(12), 2048-53
CODEN: CPBTAL; ISSN: 0009-2363
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 124:231554
AB We have prepd. several new, efficient, chiral N-acyl **pyrrolidine** carboxylic acid ligands for dirhodium-catalyzed asym. cyclopropanation and found that the steric and electronic effects of the rhodium(II) complexes and substrates influenced the enantioselectivity and catalytic activity. These electron-rich catalysts were shown to be efficient for asym. cyclopropanation using 1-chloro-1-fluoroethylene as a substrate.
IT **174588-87-5P 174588-88-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(steric and electronic effects of substrates and rhodium complex chiral catalysts in asym. cyclopropanation)
RN 174588-87-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2-ethoxy-1-[(1E)-2-phenylethenyl]-, methyl ester, (1S,2R)- (9CI) (CA INDEX NAME)

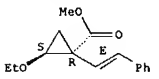
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 174588-88-6 CAPLUS
CN Cyclopropanecarboxylic acid, 2-ethoxy-1-(2-phenylethenyl)-, methyl ester, [1R-[1.alpha.,1(E),2.beta.]]- (9CI) (CA INDEX NAME)

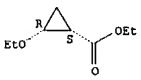
Absolute stereochemistry.
Double bond geometry as shown.

L5 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



L5 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1992:407531 CAPLUS
DOCUMENT NUMBER: 117:7531
TITLE: Asymmetric cyclopropanation of alkenes catalyzed by a rhodium chiral fortress porphyrin
AUTHOR(S): O'Malley, Sean; Kodadek, Thomas
CORPORATE SOURCE: Dep. Chem. Biochem., Univ. Texas, Austin, TX, 78712, USA
SOURCE: Organometallics (1992), 11(6), 2299-302
CODEN: ORGND7; ISSN: 0276-7333
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The synthesis and catalytic cyclopropanation activity of a new porphyrin known as the chiral fortress macrocycle is reported. This mol. has optically pure naphthyl-pyrenyl groups appended directly to the meso carbons of the porphyrin. The iodorhodium deriv. is a catalyst for the cyclopropanation of alkenes by Et diazoacetate. The syn cyclopropyl esters are the major product in each case examd. except one. In some cases very high diastereoselectivity is obsd. The enantiomeric excess resulting from chiral fortress-mediated reactions are modest.
IT **141269-61-6P 141269-62-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 141269-61-6 CAPLUS
CN Cyclopropanecarboxylic acid, 2-ethoxy-, ethyl ester, (1S-cis)- (9CI) (CA INDEX NAME)

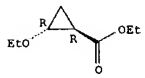
Absolute stereochemistry.



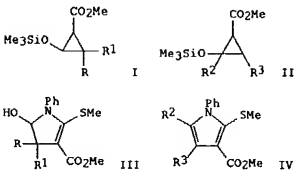
RN 141269-62-7 CAPLUS
CN Cyclopropanecarboxylic acid, 2-ethoxy-, ethyl ester, (1R-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L5 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

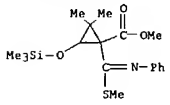


L5 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1988:221539 CAPLUS
DOCUMENT NUMBER: 108:221539
TITLE: A novel synthesis of **pyrrole** derivatives
AUTHOR(S): Brueckner, Christiane; Suchland, Brigitte; Reissig, Hans Ulrich
CORPORATE SOURCE: Inst. Org. Chem., Univ. Wuerzburg, Wuerzburg, D-8700, Fed. Rep. Ger.
SOURCE: Liebigs Annalen der Chemie (1988), (5), 471-3
CODEN: LACHDL; ISSN: 0170-2041
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 108:221539
GI

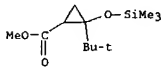


AB Enolates generated from Me 2-siloxycyclopropanecarboxylates I [R = R1 = Me, RR1 = (CH2)5] and II [R2R3 = (CH2)3, (CH2)4; R2 = CMe3, R3 = H] react with PhNCS-MeI to give Me 4,5-dihydro-1H-**pyrrolecarboxylates** III (same R, R1) after desilylation or **pyrrole** derivs. IV (same R2, R3) after treatment with CF3CO2H, resp. For the key ring enlargement an anionic 1,3-sigmatropic rearrangement is suggested. Several subsequent reactions of III (R = R1 = Me) are described.
IT **113568-50-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and desilylation of)
RN 113568-50-6 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-1-[(methylthio)(phenylimino)methyl]-3-[(trimethylsilyl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

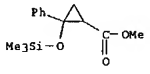
L5 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



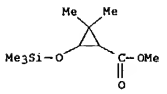
IT **77903-42-5 77903-44-7 77903-45-8**
77982-78-6 79646-62-1 82884-41-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(ring enlargement of, with Ph isothiocyanate-Me iodide, **pyrrole** deriv. from)
RN 77903-42-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2-(1,1-dimethylethyl)-2-[(trimethylsilyl)oxy]-, methyl ester (9CI) (CA INDEX NAME)



RN 77903-44-7 CAPLUS
CN Cyclopropanecarboxylic acid, 2-phenyl-2-[(trimethylsilyl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

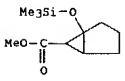


RN 77903-45-8 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-[(trimethylsilyl)oxy]-, methyl ester (9CI) (CA INDEX NAME)

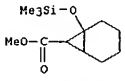


RN 77982-78-6 CAPLUS
CN Bicyclo[3.1.0]hexane-6-carboxylic acid, 1-[(trimethylsilyl)oxy]-, methyl

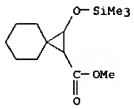
L5 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
ester (9CI) (CA INDEX NAME)



RN 79646-62-1 CAPLUS
CN Bicyclo[4.1.0]heptane-7-carboxylic acid, 1-[(trimethylsilyl)oxy]-, methyl
ester (9CI) (CA INDEX NAME)



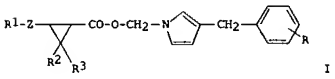
RN 82884-41-1 CAPLUS
CN Spiro[2.5]octane-1-carboxylic acid, 2-[(trimethylsilyl)oxy]-, methyl ester
(9CI) (CA INDEX NAME)



L5 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1981:121308 CAPLUS
DOCUMENT NUMBER: 94:121308
TITLE: Benzylpyrrolylmethyl esters of cyclopropane carboxylic
acids
INVENTOR(S): Henrick, Clive A.
PATENT ASSIGNEE(S): Zoecon Corp., USA
SOURCE: U.S., 5 pp. Cont.-in-part of U.S. Ser. No. 942,509.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4229352	A	19801021	US 1979-66263	19790813
US 4198527	A	19800415	US 1978-942509	19780915

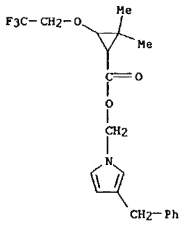
PRIORITY APPLN. INFO.: US 1978-942509 19780915
GI



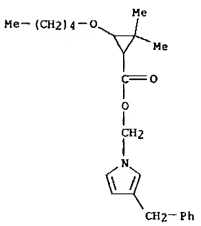
I

AB Pesticides (no data), benzylpyrrolylmethyl cyclopropanecarboxylates I (R =
H, F, Br, Cl, CF3, Me, MeO, MeS; R1 = lower alkyl, lower haloalkyl, lower
alkenyl, lower haloalkenyl, substituted phenyl; R2 = lower alkyl, halo; R3
= H, lower alkyl, halo; Z = O, S) were prepd. by the reaction of the acid
chloride and alc. in an org. solvent over a basic catalyst or the reaction
of the acid and the benzyl halide deriv. in an org. solvent in the
presence of a base. Thus, 3-(4-chlorophenoxy)-2,2-
dimethylcyclopropanecarboxylic acid was treated with SO2Cl2 and the acid
chloride was treated with 3-benzylpyrrolylmethyl alc. in the presence of
4-(dimethylamino)pyridine in C6H6 at 25.degree. for 18 h to give I (R = H,
R1 = 4-ClC6H4, R2 = R3 = Me, Z = O).
IT **76827-16-2P 76827-17-3P 76827-18-4P**
76827-19-5P

L5 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 76827-16-2 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2,2,2-trifluoroethoxy)-, [3-(phenylmethyl)-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)

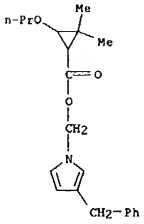


RN 76827-17-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(pentyloxy)-, [3-(phenylmethyl)-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)

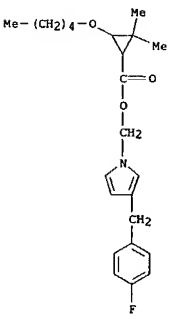


RN 76827-18-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-propoxy-, [3-(phenylmethyl)-1H-
pyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)

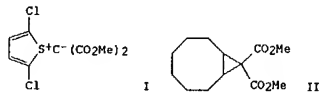
L5 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 76827-19-5 CAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(pentyloxy)-, [3-[(4-fluorophenyl)methyl]-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX
NAME)

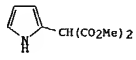


L5 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1979:71981 CAPLUS
DOCUMENT NUMBER: 90:71981
TITLE: 2,5-Dichlorothiophenium bismethoxycarbonylmethylide: a bismethoxycarbonylcarbene equivalent
AUTHOR(S): Cuffe, John; Gillespie, Roger J.; Porter, Alexander E. A.
CORPORATE SOURCE: Chem. Dep., Univ. Stirling, Stirling, UK
SOURCE: Journal of the Chemical Society, Chemical Communications (1978), (15), 641-2
CODEN: JCCCAT; ISSN: 0022-4936
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

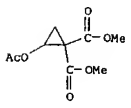
II



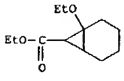
III

AB Refluxing the title compd. (I) with alkenes gave 60-86% cyclopropanated products. E.g., cyclooctene gave 86% bicyclononane II. With **pyrrole** and AcOH, the products were 73% **pyrrole** III and 98.5% AcOCH(CO2Me)2, resp.
IT **68940-76-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 68940-76-1 CAPLUS
CN 1,1-Cyclopropanedicarboxylic acid, 2-(acetyloxy)-, dimethyl ester (9CI)
(CA INDEX NAME)

L5 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



L5 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1974:47730 CAPLUS
DOCUMENT NUMBER: 80:47730
TITLE: .gamma.-Keto acid derivatives
AUTHOR(S): Wenkert, Ernest; McPherson, C. Allen; Sanchez, E. L.; Webb, R. L.
CORPORATE SOURCE: Dep. Chem., Indiana Univ., Bloomington, IN, USA
SOURCE: Synthetic Communications (1973), 3(4), 255-9
CODEN: SYNCAV; ISSN: 0039-7911
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 80:47730
GI For diagram(s), see printed CA Issue.
AB 1-Ethoxycyclohexene was treated with N2CH2CO2Et and N2CH2COMe contg. copper bronze to give the bicycloheptane I (R = CO2Et, Ac, resp.), which with concd. HCl gave 2-(carbethoxymethyl)cyclohexanone and 2-acetonylcyclohexanone, resp. Me2CHCHO was treated with **pyrrolidine** enamine and N2CH2CO2Et contg. CuCl to give the cyclopropane-carboxylate II, which was hydrolyzed to give OCHCMe2CH2CO2Et. N2CH2CO2Et and 3-pentanone morpholine enamine contg. CuCl gave EtCOCHMeCH2CO2Et. The diester III and 3% HCl gave the dilactone IV.
IT **50891-52-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 50891-52-6 CAPLUS
CN Bicyclo[4.1.0]heptane-7-carboxylic acid, 1-ethoxy-, ethyl ester (9CI) (CA INDEX NAME)



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=> d his

     (FILE 'HOME' ENTERED AT 15:31:00 ON 30 JUL 2004)

     FILE 'REGISTRY' ENTERED AT 15:31:06 ON 30 JUL 2004
L1              STRUCTURE UPLOADED
L2                8 S L1
L3              936 S L1 FULL

     FILE 'CAPLUS' ENTERED AT 15:32:15 ON 30 JUL 2004

     FILE 'REGISTRY' ENTERED AT 15:32:33 ON 30 JUL 2004

     FILE 'CAPLUS' ENTERED AT 15:32:33 ON 30 JUL 2004
L4              260 S L3
L5               13 S L4 AND PYRROL?

=> s l4 and pyrrol? and nitril?
           128218 PYRROL?
            82056 NITRIL?
L6               1 L4 AND PYRROL? AND NITRIL?

=> d l6 ibib abs hitstr
```
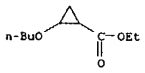

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:960478 CAPLUS
DOCUMENT NUMBER: 140:111237
TITLE: A Powerful New Strategy for Diversity-Oriented Synthesis of **Pyrroles** from Donor-Acceptor Cyclopropanes and **Nitriles**
AUTHOR(S): Yu, Ming; Pagenkopf, Brian L.
CORPORATE SOURCE: Department of Chemistry and Biochemistry, The University of Texas at Austin, Austin, TX, 78712, USA
SOURCE: Organic Letters (2003), 5(26), 5099-5101
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Lewis acid-activated donor-acceptor cyclopropanes react with aliph., arom., and .alpha.,.beta.-unsatd. **nitriles** in a novel cascade [3 + 2] dipolar cycloaddn., dehydration, and tautomerization sequence to afford **pyrroles** in moderate to excellent overall yield. This cost-effective and regiospecific method is ideally suited for the prepn. of combinatorial libraries.

IT **78932-45-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(diversity-oriented synthesis of **pyrroles** via Lewis acid-activated cycloaddn./dehydration/tautomerization reactions of various donor-acceptor cyclopropanes and **nitriles**)

RN 78932-45-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2-butoxy-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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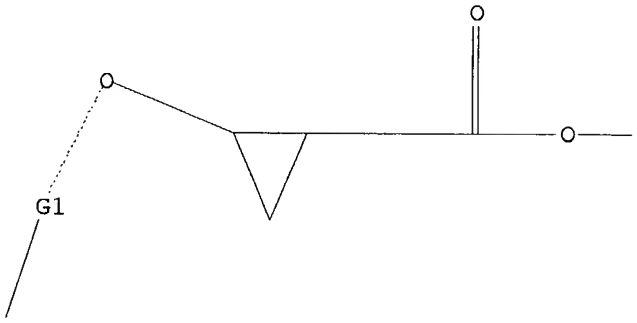
=> d l1
L1 HAS NO ANSWERS
L1 STR



G1 C,Si

Structure attributes must be viewed using STN Express query preparation.

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---Logging off of STN---

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Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	78.46	251.32

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-10.29	-10.29

STN INTERNATIONAL LOGOFF AT 15:36:12 ON 30 JUL 2004